

REMARKS

The applicant's remarks are preceded by the Examiner's comments in small, bold-face type.

Claims 45-48, 52-57, 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waterman (769,366) in view of GB 1,117,862 (GB'862).

Waterman discloses a conductive sheath and an inherent method, comprising forming a length of overlapping, helically wound conductive sheath, the conductive sheath (Figs 1-3) having an outer surface having an appearance. Waterman does not disclose after the forming, applying a coating to the outer surface of the sheath, the coating having an appearance different from the appearance of the outer surface of the sheath, nor the sheath being used for housing conductors. GB'862 discloses a conductive sheath (4) having an appearance and a coating (5) having an appearance different from the appearance of the outer surface of the sheath. It would have been obvious to one skilled in the art to modify the conductive sheath of Waterman by applying, after the forming, a coating (5) as taught by GB'862 on the outer surface of the sheath to provide a distinguishing mark on the cable. It would also have been obvious to one skilled in the art to use the conductive sheath of Waterman for housing conductors since the sheath of waterman is flexible and since using a conductive sheath for housing conductors is known in the art. In addition, it has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963) re claims 45, 42, 60).

The modified sheath of Waterman (see GB'862, Figs 1-4) also discloses the coating being continuous along at least a portion of the sheath (re claims 46, 53), the coating being continuous around the circumference of the sheath (re claims 47, 54), the coating permitting electrical conductivity between successive windings of the sheath (i.e., the successive windings of Waterman are interlocked before the coating being applied, therefore the successive windings are still in electrical contact after the coating being applied) (re claims 48, 55), the outer surface of the sheath being provided with alternating crowns and valleys along the length of the sheath (re claim 56), the crowns and valleys forming a helical configuration on the outer surface of the sheath (re claim 57), and no further process being performed that would cover the applied coating (re claim 59).

With respect to claims 45, 52, 59 and 60, contrary to the Examiner's position, it would not have been obvious to one skilled in the art "to modify the conductive sheath of Waterman by applying, after the forming, a coating (5) as taught by GB'862 on the outer surface of the sheath to provide a distinguishing marker on the cable." The Examiner has not set forth why one of

ordinary skill in the art would want to “provide a distinguishing mark on the cable” of Waterman. As such, the Examiner’s suggested motivation for combining the references is conclusory, and therefore insufficient as a basis for rejection. Furthermore, there would have been no motivation or suggestion in either reference for the proposed combination, nor any reason why a distinguishing marker on the tube of Waterman would have been desirable. GB ‘862 describes:

[H]igh voltage power cables of the type in which the conductors thereof are each provided with an insulating sleeve of a high-polymer insulating material... surrounded by a brush discharge screen comprising a conductive layer on top of the insulating sleeve... and a metal sleeve which at least partially covers the conductive layer... The insulating sleeves of the conductors of high voltage cables are normally variously coloured in accordance with an appropriate code, in order to simplify cable connections. For instance, the insulating sleeves of a three-core cable may be coloured light grey, black and red. When connecting a cable, the screen, that is to say the helical metal tape and the black conductive layer on top of the insulating sleeve must be completely removed at each end of the cable... Experience has shown that it is difficult to determine whether or not the black conductive layer... has been properly removed where the insulating sleeve concerned is itself black. Page 1, col. 1, line 11 to col. 2, line 54.

To address this problem, referring to Fig. 1 of GB ‘862, rather than providing the insulating sleeves 2 with different colors, a distinguishing marker 5, e.g., a tape, wire or strip, is placed between the black conductive layer 3 and the helical metal tape 6 that surrounds each conductor. Since the insulating sleeves 2 can then be all the same color, and a color that contrasts with the black conductive layer 3, the insulating sleeve 2 can be distinguished from the black conductive layer 3 to facilitate removal of the black conductive layer from the insulating sleeve. (See, e.g., page 1, col. 2, line 76 to page 2, col. 1, line 5; page 2, col. 1, lines 51-52; and page 2, col. 2, lines 55 and 59.)

Waterman describes a flexible tube composed of a spirally-wound interlocking strip of metal. (See, e.g., col. 1, lines 13-15.)

There would have been no motivation to modify Waterman’s tube with the distinguishing marker of GB ‘862. GB ‘862 describes placing markers on each individual conductor of a cable, not on the outer surface of a cable, as proposed by the Examiner in the modification of

Waterman's tube. One skilled in the art, presented with GB '862 and Waterman, would not have been led to place markers on the outer surface of Waterman's tube, as this is not what is described by GB '862. Rather, if one were to apply the conductors and conductor markers of GB '862 to Waterman's tube, the combination would result in conductors 1, each with its associated surrounding materials 2-6, being located within Waterman's tube. Thus, each conductor within the tube, not the outer surface of the tube, would individually include a marker.

Therefore, applicant submits that claims 45-48, 52, 56, 57, 59 and 60 are patentable over Waterman in view of GB '862.

Claims 52 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brorein (4,154,976) in view of GB'862.

Brorein discloses a conductive sheath and an inherent method, comprising forming a length of continuous conductive tubular sheath (18) for housing conductors, wherein the conductive sheath has an outer surface having an appearance and being smooth along the length of the sheath (re claim 58). Brorein does not disclose after the forming, applying a coating to the outer surface of the sheath, the coating having an appearance different from the appearance of the outer surface of the sheath (re claim 52). GB'862 discloses a conductive sheath (4) having an appearance and a coating (5) having an appearance different from the appearance of the outer surface of the sheath. It would have been obvious to one skilled in the art to modify the conductive sheath of Brorein by applying, after the forming, a coating (5) as taught by GB'862 on the outer surface of the sheath to provide a distinguishing mark on the cable.

Contrary to the Examiner's position, it would not have been obvious to one skilled in the art "to modify the conductive sheath of Brorein by applying, after the forming, a coating (5) as taught by GB'862 on the outer surface of the sheath to provide a distinguishing marker on the cable." There would have been no motivation or suggestion in either reference for the proposed combination, nor any reason why a distinguishing marker on the cable of Brorein would have been desirable.

Brorien describes a cable having a cable core 10 formed with a plurality of conductors 30 (each of which is surrounded by a layer of insulation, preferably a semi-rigid polyvinyl chloride insulation), heat resistant materials 32, 34 applied over the conductors 30, and a surrounding metal sheath 18 formed by welding a tape. (See, e.g., col. 2, lines 20-35 and lines 56-59, and col. 2, line 67 to col. 3, line 2.)

There would have been no motivation to modify Brorien's cable with the distinguishing marker of GB '862. GB '862 describes placing markers on each individual conductor of a cable, not on the outer surface of a cable, as proposed by the Examiner in the modification of Brorien's cable. One skilled in the art, presented with GB '862 and Brorien, would not have been led to place markers on the outer surface of Brorien's cable, i.e., on metallic sheath 18, as this is not what is described by GB '862. Rather, if one were to apply the method of marking of GB '862 to Brorien's cable, the combination would result in marking the non-conductive insulation surrounding each individual conductor 30 located within Brorien's cable, not the outer surface of the cable.

In response to the applicant's arguments, the Examiner states:

Applicant's arguments with respect to claims 45, 52, 59 and 60 have been considered but are moot in view of the new ground(s) of rejection except for the following.

Applicant argues that GB'862 (or UK'862) teaches placing a distinguishing marker underneath a helical metal tape. There is no description or suggestion in GB'862 of placing the distinguishing marker on the outer surface of a sheath. This argument is not found persuasive because GB'862 does teach providing the distinguishing marker (5) on an outer surface of the sheath (4) which is a helical conductive sheath. In response to applicant's argument that there is no suggestion to combine the Brorien and GB'862 references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837, F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so is found in the references themselves. Specifically, GB'862 does teach providing a coating having a difference appearance from the outer surface of a conductive sheath to provide a distinguishing marker on the sheath.

As stated above, GB '862 does not describe or suggest placing the distinguishing marker (5) on the outer surface of a cable in which multiple conductors are housed, as proposed by the Examiner in the modification of Brorien's cable. Furthermore, that GB '862 describes a distinguishing marker (5) on a conductive screen helix (4) does not provide the required motivation for combining the references as proposed by the Examiner. It is mere hindsight reconstruction, using the applicant's claims as a template, that the Examiner is employing in modifying the Brorien reference.

Therefore, applicant submits that claims 52 and 58 are patentable over Brorein in view of GB '862.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Enclosed is a check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: _____

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